# Notes Concerning Some Moths Described by William Schaus in 1915 (Lepidoptera)

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#### ABSTRACT

Taxonomic and nomenclatural notes are provided for 19 species of Neotropical moths originally described and deposited in the U.S. National Museum of Natural History by William Schaus. These species represent the families Arctiidae, Noctuidae, Notodontidae, Lasiocampidae, Lymantriidae, Saturniidae, and Megalopygidae.

In February, 1915, a paper titled "New species of Heterocera from tropical America" by William Schaus was published in the Transactions of the American Entomological Society, volume 41, pages 1-9. In that paper Schaus described one new genus and twenty-seven new species of moths representing seven families. In the very brief introduction he stated that to that date all his types were in the United States National Museum, Washington, D.C. However, he only indicated a type-specimen and a U.S.N.M. type number for one species, Hylesia multiplex Schaus (Saturniidae). Of the remaining descriptions, all but three are stated to be based on one sex only and single size measurement and single locality data only are given. Subsequent investigation indicated that these descriptions were probably based on uniques, except Titya albiapicata Schaus (Lasiocampidae) and Micrattacus friburgensis Schaus (Saturniidae), but to insure against possible unrecognized syntypes the apparent holotypes will also be labeled and designated as lectotypes herein. U.S.N.M. type numbers were assigned and the names entered in the type books at various times between December 19, 1912 and May 19, 1918, For three species, all Noctuidae, Schaus did not indicate the sex described and for two of the three species he listed multiple localities and indicated a range in wing expanse. Examination of the collec-

tions reveals that he failed to place name or type labels on the specimens and that U.S.N.M. type numbers were not assigned. Therefore, the following information is provided and certain actions taken to simplify subsequent research concerning the species described by Schaus in the paper discussed.

#### **ARCTIIDAE**

Afrida sceletozona Schaus

1915, Trans, Amer. Ent. Soc., 41: 1.

Lectotype—The specimen selected and presently designated as lectotype, a male, is labeled "Afrida sceletozona Schaus, Type"; "Type No. 15443 U.S.N.M."; "Collection Wm. Schaus"; "Aug. '08"; "Juan Vinas, CR" and "Lectotype, Afrida sceletozona Schaus, by E. L. Todd."

### Afrida polyglotta Schaus

1915, Trans. Amer. Ent. Soc., 41: 1.

Lectotype—The specimen selected and presently designated as lectotype, a female, is labeled "Afrida polyglotta Schaus, Type"; "Type No. 15442 U.S.N.M."; "Collection Wm. Schaus"; "Dec."; "Juan Vinas, Cr"; "Afrida melicerta Dr." and "Lectotype, Afrida polyglotta Schaus, by E. L. Todd."

Four species of arctiids described by Schaus on page 2 loc. cit., have been

treated in a paper by Alan Watson on the types of neotropical Arctiinae in the collection of the U.S. National Museum, 1971, Smithsonian Contributions to Zoology, Number 50. Accordingly, they are omitted from present consideration. Another species, *Chlorhoda amabilis* Schaus, 1915, Trans. Amer. Ent. Soc., 41: 3, presumably will be treated by Watson in part 2 of his paper. It is also omitted in the present study.

#### **NOCTUIDAE**

### Vespola similissima Schaus 1915, Trans. Amer. Ent. Soc., 41: 3.

Lectotype—The specimen selected and presently designated as lectotype, a male, is labeled "Vespola similissima Schaus, Type"; "Type No. 17291 U.S.N.M."; "N.F., 11.2.13, Coll. J. Arp" and "Lectotype, Vespola similissima Schaus, by E. L. Todd."

# Pseudocraspedia (sic) eubleptica Schaus 1915, Trans, Amer. Ent. Soc. 41:3.

Schaus did not indicate the sex described for this species and stated: "Expanse, 12 to 14 mm." and "Habitat: Caché, Tuis, Juan Viñas, Costa Rica." In the collection of the U.S. National Museum there are 4 female specimens which are presumed to be syntypes. The specimens are labeled 1) "Juan Vinas, CR"; "Nov." and "Schaus and Barnes coll." 2) "Juan Vinas, CR"; "July" and "Schaus and Barnes coll." [Abdomen and right hindwing missing.] 3) "Cachi, CR"; "Sept." and "Schaus and Barnes coll." 4) "Tuis, CR"; "May"; "Schaus and Barnes coll." and "Photograph 367" [The photograph was one I had made prior to a study trip to the British Museum.]. The specimens were in the unit tray containing the Schaus name for the species, but no specimen bears a name label, type label, or a U.S.N.M. type number.

Lectotype—The specimen from Tuis, Costa Rica has been selected, labeled, and is presently designated as the lectotype. The U.S.N.M. type number, 68151, has been assigned and placed on the specimen.

In the original description Schaus stated that the species was allied to *P. leucozona* Hampson. Comparison of the photograph of the lectotype with the holotype of the latter species in the British Museum (Natural History) convinced me that they represent the same species. Therefore, *Pseudocraspedia eubleptica* Schaus, *loc. cit.*, is considered a synonym of *Pseudcraspedia leucozona* Hampson, 1910, Catalogue of the Lepidoptera Phalaenae in the British Museum, 10: 260, pl. 156, fig. 17. NEW SYNONYMY. It should also be noted that Schaus used an unjustified emendation of the generic name.

# Lycaugesia homogramma Schaus

1915, Trans. Amer. Ent. Soc., 41: 3.

There are 2 specimens in the collection of the U.S. National Museum from the locality cited in the original description, Juan Viñas, Costa Rica, but only 1 that agrees in size with the statement, "Expanse, 15 mm." The other specimen has an expanse of only 12 mm and it lacks an abdomen. It is not considered to be a syntype.

Lectotype—The specimen selected and presently designated as lectotype is a male labeled "Juan Vinas, CR"; "Nov.", "Schaus and Barnes coll." and "Lectotype, Lycaugesia homogramma Schaus, by E. L. Todd." The U.S.N.M. type number, 68152, has been assigned to the lectotype.

#### Eutelia inconstrictrix Schaus

1915, Trans. Amer. Ent. Soc., 41: 4.

Schaus did not specify the sex or the number of specimens from which the species was described, but stated: "Expanse, 27 to 29 mm." and "Habitat: Juan Viñas, Tuis, Costa Rica." There are 3 males and 2 females in the collection of the U.S. National Museum labeled "Juan Vinas, CR" and "Collection Wm. Schaus", but 2 of the males are smaller than indicated in

the original description, being 25 and 26 mm in expanse. The third male measures 27 mm in expanse and the 2 females 27 and 29 mm respectively. There is 1 specimen, a female, from Tuis, Costa Rica, the other locality mentioned in the original description. It is labeled "Tuis, CR"; "May 28-June 4"; and "Collection Wm. Schaus." It measures 28 mm in expanse.

Lectotype—I have selected, labeled, and now designate the male from Juan Viñas, Costa Rica that agrees in size with the original description as lectotype of this species. The U.S.N.M. type number, 68153, has been assigned to the lectotype.

In the collection of the United States National Museum *E. inconstrictrix* Schaus is listed as a junior synonym of *Eutelia apithana* Dyar, 1914, Proc. U.S. Nat. Mus., 47: 382. This synonymy is correct, but as I am unable to locate a published record of this fact, notice of the synonymy is hereby indicated. NEW SYNONYMY.

# Pucialia acronyctoides Schaus

1915, Trans. Amer. Ent. Soc., 41: 4

Lectotype—A male labeled "N.F., 11-2-13, Coll. J. Arp"; Type No. 18514 U.S.N.M."; "Pucialia acronyctoides Schs. Type" and "Lectotype, Pucialia acronyctoides Schaus, by E. L. Todd."

There is a second male in the collection of the U.S. National Museum from Nova Friburgo, Brazil (Locality spelled out on label) that is also 43 mm in expanse. It may be a syntype, but if so, the dark spot at the apex of the hindwing was not mentioned in the original description.

# Hemicephalis grandirena Schaus

1915, Trans. Amer. Ent. Soc. 41: 4.

Lectotype—There is only 1 specimen in the collection of the U.S. National Museum from the locality cited in the original description. It is a female and is labeled "St. Jean, Maroni, F. Guiana"; "Collection Wm. Schaus"; "Type No. 18513 U.S.N.M." and "Hemicephalis grandirena Schs., Type." It has an ex-

panse of 37 mm as stated in the original description. Without much doubt this specimen is the holotype, but in line with the reasoning given in the introductory statement I presently select, label and designate it as the lectotype of the species concerned.

# Pharga barbara Schaus

1915, Trans. Amer. Ent. Soc., 41: 5.

Lectotype-There is only 1 specimen in the collection of the U.S. National Museum. It is a male, 45 mm in expanse, which is in agreement with the information given in the original description. The specimen is labeled "Neu Frbg., Jan. 1913, Coll. J. Arp" and "Rhosologia barbara Schs., type." The discrepancy in generic names in the paper and on the name label of the specimen is presently unexplainable. It is not known when the name label was affixed and accordingly it is not known whether the different usage represents a change in opinion of generic placement or whether it represents a mere lapsus. If the former, the change could have been in either direction. The typespecies of both generic names, Pharga fasciculella Walker and Rhosologia porrecta Walker, belong to a large complex of species related to Herminodes Guenée. Neither of the aforementioned type-species are very similar to Pharga barbara Schaus in pattern of maculation. Hampson, 1926, Descriptions of New Genera and Species of Lepidoptera Phalaenae of the Subfamily Noctuinae (Noctuidae) in the British Museum (Natural History), p. 249, placed Rhosologia Walker, 1865, in the synonymy of Herminodes Guenée, 1852. Pharga Walker, 1863, originally described as a crambid, was not treated by Hampson in 1926; however, it should be recalled that the research was conducted between 1913 and 1920 and published by Tams et al 6 years later; also, that the work was primarily descriptions of new genera and new species and that generic synonymies were given only for previously described genera in which new species were de-

scribed. It is, therefore, not impossible that Hampson could have supplied information about the genera in correspondence with Schaus. One fact is clear: Schaus described only 1 species with the trivial name barbara. Accordingly, I consider the specimen in the U.S. National Museum to represent the material on which the description was based and not a specimen bearing a manuscript name. As Schaus did not enter the species in the type book or assign a type number, I have done so. The type number 68154 U.S.N.M. has been assigned to it. The specimen is now selected, labeled and designated lectotype of Pharga barbara Schaus.

#### **NOTODONTIDAE**

# Arpema meglopia Schaus

1915, Trans. Amer. Ent. Soc., 41: 5.

Lectotype—The specimen selected and presently designated as lectotype, a male, is labeled "Arpema megalopia Schs., type"; "Joinville, S. E. Brazil"; "Type No. 18538 U.S.N.M."; "Collection Wm. Schaus" and "Lectotype, Arpema megalopia Schaus, by E. L. Todd." This is the only specimen from the locality cited in the original description in the collection of the U.S.N.M.

The specimen is actually 68 mm in expanse, not 58 mm as stated in the original description. The latter figure must be an author or printer error. The specimen has been eviscerated, but the valves of the genitalia appear to be intact. A genitalic preparation will be necessary to determine if there has been any damage to other parts of the genitalia.

# Misogada blerura Schaus

1915, Trans. Amer. Ent. Soc., 41: 6.

There are 2 males, each 30 mm in expanse, from the locality Novo Friburgo, Brazil, in the collection of the U.S. National Museum. The specimens are labeled 1) "Misogada blerura Schs., type"; "Type No. 21829 U.S.N.M." and

"N. F., 11-2.13, Coll. J. Arp." 2) "Misogada blerura Schs., Schs. Wm. 2.24 [different pen and ink]"; "Novo-Friburgo, II 191 0 [Feb. 1910?], J. Arp" and "Dognin Collection."

Lectotype—I have selected, labeled and now designate the specimen bearing the Schaus type label and the U.S.N.M. type number label as the lectotype. If the Dognin collection label on the second specimen is correct, it probably is not a syntype, although the specimen could have been received by Dognin from Schaus after he described the species.

# Malocampa friburga Schaus

1915, Trans. Amer. Ent. Soc., 41: 6.

Lectotype—The specimen selected and presently designated, a male 49 mm in expanse, is the only specimen of the species from Nova Friburgo, Brazil in the collection of the U.S. National Museum. It is labeled "Malocampa friburga Schs., type"; "Type No. 18800 U.S.N.M.; "N. Fribg., 11.10.12, Coll. J. Arp" and "Lectotype, Malocampa friburga Schs., by E. L. Todd."

#### LASIOCAMPIDAE

## Titya albiapicata Schaus

1915, Trans. Amer. Ent. Soc., 41:6.

Lectotype—There are 2 males in the collection of the U.S. National Museum from Nova Friburgo, Brazil. Both are somewhat rubbed. The specimens are labeled 1) "New Frbg., Jan. 14. 13, Coll. J. Arp"; "Type No. 17240 U.S.N.M." and "Tolype albiapicata Schs., type." 2) "N. Fribg., 11.11.12, Coll. J. Arp"; "513" and "Collection Wm. Schaus." The specimen bearing the Schaus type label has been selected and is now designated and labeled as lectotype. It agrees with the expanse measurement given in the original description, 28 mm. The other specimen has an expanse of 27 mm.

The reason for the difference in the generic name used in the original description

and on the type label is not known. It may be an indication that the type label was not placed on the specimen by Schaus until some later date. The species is placed in the genus *Tolype* in the collection and it was so placed by Draudt, 1927, *in* Seitz, Die Gross-Schmetterlinge der Erde, 6: 579 and by Collier, 1936, Lepidopterorum Catalogus, pars 73 (Lasiocampidae), p. 52. In the later work, Collier treats *Titya* Walker, 1855 as a junior synonym of *Tolype* Hubner, 1820 [1822 cited by Collier].

# Claphe semifunebris Schaus

1915, Trans. Amer. Ent. Soc., 41: 7.

Lectotype—The specimen selected and now designated as the lectotype, a male 35 mm in expanse, is in the collection of the U.S. National Museum. It is labeled "Neu Frbg., Jan., 1913, Coll. J. Arp"; "Type No. 18536 U.S.N.M."; "Claphe semifunebris Schs., type" and "Lectotype, Claphe semifunebris Schaus by E. L. Todd."

# Ocha gorgas Schaus

1915, Trans. Amer. Ent. Soc., 41: 7.

Lectotype—Only 1 specimen of this species is in the collection of the U.S. National Museum. It is a male, 26 mm in expanse, not 25 mm as stated in the original description. It is labeled "Ocha gorgas Schs., Type"; "Joinville, S. E. Brazil"; "Type No. 17292 U.S.N.M." and "1101." The specimen is probably a holotype, but since that is not known to be a certainty it is selected, labeled and now designated as the lectotype.

#### LYMANTRIIDAE

#### Trochuda ochreata Schaus

1915, Trans. Amer. Ent. Soc., 41: 7.

Lectotype—The specimen selected and now designated as the lectotype, a male 32 mm in expanse, is labeled "Trochuda ochreata Schs, type"; "Type No. 18510 U.S.N.M."; "65 a" and "sp. fig." It is the only specimen of the species in the collec-

tion of the U.S. National Museum. The label "sp. fig." may refer to the illustration in Seitz, Die Gross-Schmetterlinge der Erde, vol. 6, pl. 74, row e. There is no locality label, but the number label "65 a" may have had some bearing on the locality citation by Schaus of "Southern Brazil." The specimen of *Trochuda partalba* Schaus discussed next has the number "65" on the back of the locality label. The specimen labeled as type by Schaus has also been labeled by me "Lectotype, Trochuda ochreata Schaus by E. L. Todd."

# Trochuda partalba Schaus

1915, Trans. Amer. Ent. Soc., 41: 8.

Lectotype—A single specimen only, a male 32 mm in expanse, is in the collection of the U.S. National Museum. It has been selected and is now designated as lectotype. The specimen is labeled "Trochuda partalba Schs., type"; "N. Frbg., 15.12.12, Coll. J. Arp (65 in ink on the reverse of label)"; "Type No. 18511 U.S.N.M."; "Sp. fig." and "Lectotype, Trochuda partalba Schaus by E. L. Todd."

The forewings of the specimen have not been drawn as far forward in spreading as in the lectotype of *Trochuda ochreata* Schaus. The specimen of *partalba* is actually a slightly smaller specimen although the measurement of expanse is the same.

#### Trochuda roseidorsum Schaus

1915, Trans. Amer. Ent. Soc., 41: 8.

Lectotype—There are 17 specimens of this species in the collection of the U.S. National Museum, but only 1 of the examples is from the locality given in the original description. That specimen has been selected and is now designated as the lectotype. It is labeled "Trochuda roseidorsum Schs., type"; "Joinville, S. E. Brazil"; "Type No. 18512 U.S.N.M."; "982 a [?]" and "Lectotype, Trochuda roseidorsum Schaus by E. L. Todd."

After the descriptions of the preceding 3 species Schaus stated "These three species

are congeneric with stilpnotia Walker." Walker did not describe a species or a genus by that name. Schasu apparently intended to indicate that the 3 species were congeneric with certain species described by Walker in the genus Stilpnotia Westwood and Humphreys, 1841. The genus Trochuda Schaus, 1904, Trans. Amer. Ent. Soc., 30: 40 (type-species Trochuda bilinea Schaus by monotypy) is not treated at all by Bryk, 1934, Lepidopterorum Catalogus, pars 62. The type-species and other species subsequently described in Trochuda by Schaus are treated and included in the genus Thagona Möschler, 1883, by Bryk, but he did not indicate after the references the original genus as is the usual practice in the Lepidopterorum Catalogus.

#### **SATURNIIDAE**

Micrattacus friburgensis Schaus 1915, Trans. Amer. Ent. Soc., 41: 8.

Lectotype—There are 2 males in the collection of the U.S. National Museum with identical locality labels. One expanded 39 mm, the other 40 mm, but Schaus may have thought both measured 39 mm. The specimen measuring 40 mm bears the Schaus type label. It is selected and now designated as the lectotype. The specimen is labeled "Micrattacus friburgensis Schs, type"; "Type No. 18516 U.S.N.M."; "N. F., 11.2.13, Coll. J. Arp"; "gen-p. 4179, J. O. F., Sept. 1949" and "Lectotype, Micrattacus friburgensis Schaus by E. L. Todd."

The genitalia were prepared by Jose Oiticica-Filho who has prepared a number of papers on the types of Saturnioidea in the U.S. National Museum.

# Dirphia aphrodite Schaus

1915, Trans. Amer. Ent. Soc., 41: 9.

Lectotype—The specimen selected and presently designated the lectotype, a male 58 mm in expanse, is labeled "Dirphia aphrodite Schs, type"; "Type No. 18508 U.S.N.M."; "Curitiba, Coll. J. Arp"; "Gen. prep. 4111, J. O. F. [Jose Oiticica-Filho], Aug. 1949." and "Lectotype, Dirphia aphrodite Schaus by E. L. Todd." The difference in expanse between the measurement of the specimen, 58 mm, and that given in the original description, 48 mm, must be a typographical or author's error. The lectotype is the only specimen from Curitiba in the collection of the U.S. National Museum.

#### **MEGALOPYGIDAE**

Repnoa arpi Schaus

1915, Trans. Amer. Ent. Soc., 41: 9.

Lectotype—There is only a single specimen from Nova Friburgo, Brazil in the collection of the U.S. National Museum. It is a male, 28 mm in expanse. This specimen is selected and designated as the lectotype. It is labeled "Repnoa arpi Schs, type"; "Type No. 18515 U.S.N.M."; "New Frbg., Jan. 1913, Coll. J. Arp" and "Lectotype, Repnoa arpi Schaus by E. L. Todd." The species is presently placed in the genus Podalia Walker